

UNIVERSITY OF QUEENSLAND

Computer Centre

WEEKLY NEWSLETTER

Date : Week ended 2 September 1971
Authorization : Director of the Computer Centre

1. OPERATIONS

1.1 PDP-10 System

Friday	27 August	Testing of new Batch, 1305-1740.
Monday	30 August	End-of-day accounting procedures, which could not run previous night due to errors, 1000-1054 Testing of new Batch, 1320-1800 Card reader maintenance, 1740-1755 System failure, offline 1854-1906, 1919-1928 Monthly invoices processed, 2005-2220.
Tuesday	31 August	System failure, offline 1208-1217 Testing of new Batch, 1240-1800 System failure, offline, 2015-2035.
Wednesday	1 September	System failure, offline 1305-1318 Testing of new Batch, 1320-1720 System failure, 1839-1857.
Thursday	2 September	Testing of new Batch, 1258-1810 System failure, offline 1540-1550.
Schedule for forthcoming week:		Maintenance 0700-0900, 2400 Operations 1000-2130

1.2 GE-225 System

Thursday 2 September Card reader maintenance, 1210-1230
Schedule for forthcoming week: Maintenance 0700-0900, 2000-2100
Operations 0900-2000, 2100-2400

2. PDP-10 FORTRAN ERROR

Inputting a hollerith string into a format statement containing single quotes has an error in that the next character to be input is ignored,

e.g. input under ('ΔΔΔΔΔ',I4)

ABCDE1234

is then output as

ABCDE234Ø

Users should note also that inputting a single quote character into a format statement or array will result in the character translated on input to the double quote character. This may seem anomalous but is a reasonable action if single quotes are not to be illegal in this situation.

Programmers are advised to use H type rather than single quotes for inputting hollerith strings to avoid both these problems,

e.g. ('ΔΔΔΔΔ',I4)

should be replaced by

(5HΔΔΔΔΔ,I4)

if this is to be used as an input format statement. The same remarks apply to formats in arrays.

example:

The following program

```
1  PRINT 10
10 FORMAT (' INPUT UNDER ('SSSSS',I4)'/)
   READ 11,INT
11  FORMAT('SSSSS',I4)
   PRINT11,INT
   GO TO 1
   END
```

produces the following results:

```
INPUT UNDER ('SSSSS',I4)
.....1234
....2340
INPUT UNDER ('SSSSS',I4)
..'..12345
..'..2345
INPUT UNDER ('SSSSS',I4)
''''12345
''''2345
```

3. NEW BATCH SYSTEM

The new batch processing system will be implemented on the PDP-10 on THURSDAY 9 SEPTEMBER.

Full details of the new Batch are given in the special edition of the newsletter appended. The new Batch has been extensively tested but users are asked to check their outputs most carefully and report any discrepancies to the Computer Centre.

Two errors that may occur are as follows:

- (a) Under some circumstances, input records will not be read correctly. If the fields read terminate before the end of the card, but additional data is punched on the card up to column 78 then the error is likely to be experienced. It will manifest itself by the overprinting of adjacent lines of output or the absorption of the first column of a successive card, so that data fields are apparently shifted one place left.
- (b) If a run terminates with a monitor detected error, then under some circumstances, the end of the message may be overwritten by a portion of some previous input record.

Both these errors are being investigated and it is anticipated that they will shortly be fixed.

4. PDP-10 FORTRAN PROBLEMS

A format specifier in say a read, write, encode or decode statement can only refer to a format statement or an array which at the time of execution will contain a legitimate format string. If other than these 2 possibilities occur, the error will not be detected until an attempt is made to execute the statement. At present, the FORTRAN operating system attempts to output the character in the format string which is illegal (not output correctly at present) and also the format string which contained it. If the format specifier referred to say the statement ending a DO loop, then the execution package will attempt to output locations of the user's program as a character string, with generally unuseful results. A change is in the process of being implemented that will list properly the character discovered as being in error, and subsequently a more meaningful message will be output if the string pointed at is found not to be a legitimate character string.

The following errors have been corrected but the patches are yet to be implemented.

- (a) The file separator character is not detected by the operating system when reading under any format other than type A.
- (b) OFILE sometimes produces the wrong extension to a data file.
e.g. FOR10/Z\$C